STATE WATER RESOURCES CONTROL BOARD DIVISION OF FINANCIAL ASSISTANCE PRELIMINARY FUNDING COMMITMENT (PFC) CLEAN BEACHES INITIATIVE (CBI) GRANT PROGRAM FAAST PIN: 27681

RECIPIENT: HEAL THE BAY

PROJECT TITLE: PREDICTIVE MODELS OF BEACH WATER QUALITY: PHASE III IMPLEMENTATION OF A CALIFORNIA BEACH WATER QUALITY NOWCAST SYSTEM

TOTAL PROJECT COST: \$869,100 TOTAL CBI GRANT REQUEST: \$869,100

GRANT MANAGER: Daron Pedroja, Environmental Scientist (916-319-9123 or

Daron.Pedroja@waterboards.ca.gov)

AUTHORITY

The Clean Beaches Initiative (CBI) Grant Program provides funding for projects that restore and protect the water quality and the environment of coastal waters, estuaries, bays and near shore waters. The CBI Grant Program was initiated in response to the poor water quality and significant exceedances of bacterial indicators revealed by Assembly Bill (AB) 411 monitoring at California's beaches. Funding is available from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act (Proposition 84). In addition, there are unused or re-appropriated funds remaining from the California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Act of 2002 (Proposition 40) and the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Proposition 50).

The State Water Board adopted Resolution No. 2012-0020 on June 5, 2012, which revised the CBI Guidelines used to solicit applications, evaluate proposals, and award grants for Proposition 84, Chapter 7 funds, and any unused or re-appropriated Proposition 40 and 50 CBI funds. The resolution authorized the Deputy Director of the Division of Financial Assistance (Division) to approve proposed projects, execute grant agreements and amendments to implement the proposed projects and utilize funds from projects which are withdrawn or completed under budget to fund additional projects recommended by the Clean Beaches Task Force (CBTF), or augment the scope and budget of projects previously awarded.

Heal the Bay, a non-profit organization, submitted an application for funding this Project through the Proposition 84 CBI Grant Program in January 2009. The proposed project met the specific CBI program research priority listed in the Guidelines for that Solicitation, to design and test a predictive model for public notification of water quality conditions at California beaches. However, due to a freeze imposed on bond-funded grant projects in December 2008, the grant Solicitation was closed and the application was not reviewed or recommended for approval at that time. The State Water Board determined that the Project met the Proposition 84 CBI priorities and was consistent with the 2005-2006 Consolidated Grants Program Guidelines, which included the Coastal Nonpoint Source funds. The State Water Board adopted Resolution No. 2012-0003 on January 10, 2012, to commit \$305,090 from Proposition 50 Coastal Non-Point Source Grant funds to conduct Phase I of this project. The resolution authorized the Deputy Director of the Division to execute the Grant and any amendments to implement the Project. Agreement No. 11-106-550 was executed to complete the Project, and those project elements were completed.

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Predictive Models of Beach Water Quality: Phase III Beach Water Quality Nowcast System

Preliminary Funding Commitment

Heal the Bay then proposed to complete a second phase to this Project. The Phase II application was submitted to FAAST on June 18, 2014 and a Preliminary Funding Commitment for \$281,489 was posted on the State Water Board's website for public review on June 24, 2014. Under the authority granted in Resolution No. 2012-0020, the Deputy Director of the Division approved the PFC on July 15, 2014. Amendment 2 to Agreement No. 11-106-550 was executed to complete the Project, and Heal the Bay is nearing completion of the work elements.

Heal the Bay has proposed to complete a third phase to this Project. The Phase III application was submitted to the Division on November 13, 2015 and it has been determined to be complete. The Phase III application was also provided to the CBTF for comment, and no significant issues were raised. The Division now proposes to add CBI funding to complete Phase III of the Project. This PFC shall be posted on the State Water Board's internet website, and circulated to interested parties for review and comment prior to the Deputy Director augmenting the scope and budget to Agreement No. 11-106-550-2.

PROJECT OBJECTIVE

Phase I of the Project developed and tested predictive models of water quality at California marine beaches. The models predict when beaches are likely to be in and out-of compliance with water quality standards by using fecal indicator bacteria (FIB), and environmental data. The Phase II Project optimized performance, and piloted predictive models at three beaches. During the pilot, Heal the Bay developed a guidance document for using predictive models within a beach monitoring and public notification program, and a report of their findings and recommendations.

The objective of the proposed Phase III of the Project is to improve public health protection in California by significantly expanding the number of beaches with predictive models, and integrating them into a predictive beach water quality notification system (Nowcast). The Nowcast system will provide daily predictions of FIB exceedance using real-time environmental data, and the most recent FIB results from AB411 monitoring.

PROJECT DESCRIPTION

The proposed Phase III of project would incorporate the work completed in Phases I and II to build a beach water quality Nowcast system for 15-20 California beaches implementation during the dry season, and 1-4 surf beaches for the wet season. In close cooperation with beach managers, the models will be developed and maintained by Heal the Bay, and will include users' manuals and instructions. Models will be recalibrated annually during the grant period.

The total eligible cost of the Phase III Project is \$869,100. Heal the Bay requested a CBI grant amount of \$869,100 for the Project.

ENVIRONMENTAL IMPACT

For Phase I, the State Water Board has filed a Notice of Exemption (NOE) for CEQA compliance at the State Clearing House on July 3, 2012. Phase III also meets the following exemption:

Section 15306: Class 6 Information Collection - Basic data collection and research with no disturbance to an environmental resource. No environmental impacts are expected as a result of this project.

Heal the Bay

Predictive Models of Beach Water Quality: Phase III Beach Water Quality Nowcast System

Preliminary Funding Commitment

FISCAL IMPACT

As of July 1, 2015 the cumulative balance available for the CBI Grant Program funded by Proposition 40, 50, and 84 is:

 July 1, 2015:
 \$37,069,422

 Approved PFCs
 \$9,980,912

 Draft PFCs (proposed commitments):
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 Heal the Bay - FAAST PIN: 27681
 \$869,100

 Funds Remaining for Future Commitments:
 \$26,219,410

REGIONAL WATER BOARD IMPACT

The Project does not directly impact a Regional Water Board. The State Water Board's Division of Water Quality Supports the Project.

ROUTINE, NON-CONTROVERSIAL PROJECT

The proposed Project is routine and non-controversial based on Division staff's consideration of the documents and information provided by Heal the Bay, regulatory agencies, and written responses from the CBTF. There has been no indication of a protest or controversy regarding the proposed Project.

PUBLIC REVIEW

The PFC was posted on the State Water Board's internet website for public review on December 18, 2015.

APPROVAL

Using the authority delegated by the State Water Resources Control Board on June 5, 2012, in Resolution No. 2012-0020, I hereby:

Approve a Clean Beaches Initiative Grant Program Preliminary Funding Commitment of \$869,100 for Heal the Bay's Predictive Models of Beach Water Quality: Phase III Implementation of a California Beach Water Quality Nowcast System.

Darrin Polhemus, Deputy Director	Date	
State Water Resources Control Board		

Reviewed by:
Office of Chief Counsel
Date:

Division of Financial Assistance